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Mississippi Valley Division
US Army Corps of Engineers

Open Channels

Memphis District biologist Gregg Williams (left) talks with Brent Sutton, project manager for the Memphis and Shelby County Port Commission, about our prairie grass restoration efforts.

Memphis, Vicksburg districts bring Corps story to Ducks Unlimited festival

by Jim Pogue, Memphis District
photos by Brenda Beasley, Memphis District

Memphis and Vicksburg districts teamed to bring the Corps message to more than 3,000 people at the Ducks Unlimited Great Outdoors Festival May 30 - June 1. The event took place at the Agricenter International in East Memphis.

"It was great talking to the kids who attended the event, and answering people's questions," Gregg Williams, Memphis District Regulatory Branch biologist said. "I used the cell phone we had there to get answers to people's questions right on the spot. I enjoyed telling the public what the Corps does here in the Mid-South."

Memphis District focused its half of the 20-foot-wide booth on their efforts to restore native grasses to the Grand Prairie region of eastern Arkansas. Working with a broad spectrum of state and local agencies, they have worked to produce prairie grass seeds for use in restoration efforts under the Grand Prairie Area Demonstration Project and Bayou Meto Basin Project.

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In this issue....

Generally Speaking

by Brig. Gen. Don T. Riley

This period of time is one of extraordinary activities and decisions for USACE leadership ranging from transformation initiatives, to competitive outsourcing, to constrained resources, to expanding requirements. There are many challenges to be overcome in the coming months that will stretch our capabilities; but I am confident that we have a fully capable team and are up to the task.

This great Mississippi River requires no less from each one of us and our many partners. Whether you are a human resources manager, a biologist, hydrologist, engineer or park ranger, you are part of a magnificent team of dedicated professionals who serve our nation selflessly. We have a mission that is critical to the future of our nation, and you should be proud to be a part of it. It is a great honor for me to be a part of this wonderful Mississippi Valley Division team and to be able to see daily the benefits we bring to the citizens of America.

We now have many of our friends and co-workers serving on the sands of Iraq. As important as the work that we do in our own areas, the challenges they face everyday make the ones we face seem pale in comparison. Not only are their living conditions tough, but so are their working conditions – facing daily dangers, including attack. And they are counting on us to do our job well.

As good as our personnel in Iraq and Afghanistan are, however, they are typical of what I find throughout the division – men and women willing and able to do whatever it takes to improve the lives of those around us. You and our partners are the salt of America – you protect lives and preserve livelihoods, you work in and through communities all over the nation, and you are seasoned professionals to whom America looks to solve its toughest engineering challenges.

You have an outstanding leadership team that is working very hard and long to do what is right for you and the Corps. I ask that you do the very best work you can and let your leaders worry about the future – and they will earn your trust and respect.

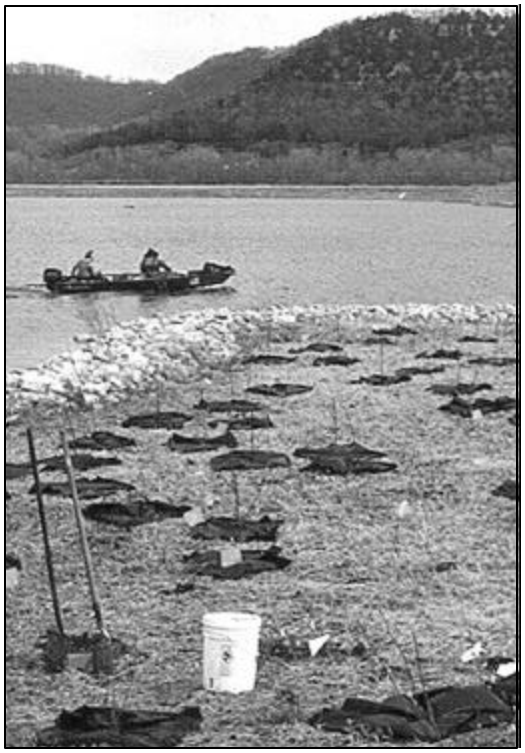
I'm proud of each and every one of you who serve in and for MVD, no matter where you happen to call home today. Thank you for the great privilege I have to command this division and thank you for what you do for our nation.

St. Paul District, Fish and Wildlife Service create island habitat

By Stephanie Ehnstrom
and Kurt Brownell
St. Paul District

The St. Paul District teamed up with the U.S. Fish and Wildlife Service to better the environment and protect the wildlife along the Upper Mississippi River April 24.

Col. Robert Ball, district engineer, and Lt. Col. Tom O'Hara, deputy district engineer, joined Randy Urich, Jon Sobiech and Kurt Brownell from the natural resources office in La Crescent, Minn., along with Fish and Wildlife Service employees, to plant trees at Polander Island April 24.



Nearly 40 volunteers from the Corps and Fish and Wildlife Service planted approximately 1,700 shrubs, including red osier dogwood, high bush cranberry and chokecherry on Polander Island in Pool 5A on the Mississippi River near Fountain City, Wis., April 24. The Mississippi River island is in the Environmental Management Program. The planting, conducted during Earth Week, celebrated the National Wildlife Refuge System Centennial.

Randy Urich (left), a forester with the Corps in La Crescent, Minn., and Keith Beseke, a retiree from the Fish and Wildlife Service office in Winona, Minn., plant a tree at Polander Lake Environmental Management Project April 24.

Polander Island, constructed about three years ago, is located on the Mississippi River near Lock and Dam 5A, Fountain City, Wis.

The group planted approximately 1,700 shrubs of three different species, including red osier dogwood, high bush cranberry and chokecherry.

On April 26, the Fish and Wildlife Service supervised a group of private citizen volunteers who completed planting the remaining trees and shrubs. Volunteers planted green ash, silver maple, swamp white oak and hackberry trees. A total of 3,625 trees and shrubs of seven different species were planted. The plants will provide wildlife benefits, as well as help stabilize the island against erosion.

The leadership development team participated in the environmental stewardship to enhance their leadership skills. Team building is also a requirement in fulfilling their leadership development. Sharonne Baylor, a member of the leadership development program fiscal year 2003 class from the eastern area engineer office, coordinated this venture.

Participating LDP team members included, Lupe Santos-Jensen, civilian personnel advisory center; Stephanie Ehnstrom, resource management; Deb Griffith, a ranger at Cross Lake; Michelle Schneider, project management; and Tammy Moore, contracting division.

Vennemann applies real estate skills in Turkey

By Peter Verstegen, St. Paul District

Bill Vennemann, a St. Paul District realty specialist, quickly shifted gears when a change in international policy impacted his mission in Turkey.

Vennemann arrived in Turkey in February to negotiate United States access and use of property as part of Operation Iraqi Freedom. His unit's mission changed to disposal and close out when the Turkish government declined to authorize the United States use of portions of the country as part of the operation.

Along the way, he met people in a different country, negotiated through an interpreter, adapted to operate in spontaneously changing conditions and learned "how much the Army is really hurry up and wait." He waited in lines, waited for planes and waited on diplomacy.

Vennemann left St. Paul, Minn., as part of a Contingency Real Estate Support Team Feb. 9.

His first stop was Ft. Benning, Ga. "I spent four to five hours filling out papers," he said, "mostly with the same information: name, social security number, age, rank, sex." Army officials checked his medical records for 14 vaccinations. He already had nine of 14 shots.

With paperwork done, Vennemann and other Corps civilians drove to Charleston Air Force Base, S.C., to board a military aircraft to Germany. The team waited a day for a layover in Germany and took another military aircraft to Incirlik Air Base, Turkey.

Wearing BDU's for the first time, Bill Vennemann, a realty specialist with the St. Paul District, worked in Turkey beginning Feb. 20. His initial duty station was Incirlik Air Base, Turkey.

Corps Real Estate Support Team (CREST) functions in Turkey had been in a holding pattern in March, waiting for the Turkish government to authorize the United States use of portions of the country as part of Operation Iraqi Freedom.

The primary role of CREST members in this deployment was to acquire, manage and dispose of real estate within the assigned theater of operations - southern Turkey in this case. Outside the combat zone, it acquires leases for properties such as ports, staging areas, training and maneuver areas, supply depots and installation headquarters.

Vennemann and members of the CREST team supplemented a group from Germany that had been in Turkey for a couple of weeks. He was assigned to Iskenderun, a port city in the Mediterranean Sea in southeast Turkey, to assist with acquisition of leases and easements for the port facilities to unload ships. The city is near the border with Syria.

He spent three to four weeks assisting the group and then returned to Incirlik just before the war started March 19.

At Incirlik Air Base, Vennemann assisted with reports and managed information in the office. "We have terminated all but two of the easements that were acquired [as part of Operation Enduring Freedom]," he said.

He experienced his first taste of barracks life at Ft. Benning. He also stayed in a tent the first week at Incirlik Air Base and again when he returned from Iskenderun.

"You need to be in half-way decent shape," he said. "They issue you two to three 40-plus pound duffel bags of equipment along with the personal stuff you bring." A helmet, flak vest, gas mask and chemical suit were part of his equipment.

He returned to his job in St. Paul April 25.

Three-district team marks trends in forest growth

St. Paul District partners to establish trends in forest growth on Corps lands

By Kurt Brownell, St. Paul District

Personnel from the natural resources project office in La Crescent, Minn., partnered with St. Louis and Rock Island districts to decide how best to establish permanent forest monitoring plots on Corps lands within the three districts.

Randy Urich, Jon Sobiech and Kurt Brownell met natural resources personnel from the other two districts in Hannibal, Mo., from March 31-April 1 to establish a protocol to monitor forest lands in the three districts.

The primary objectives of the monitoring is to document long-term trends in forest growth, health and vegetative changes resulting from site elevation, soil structure and disturbances such as large floods or wind damage.

The group visited islands in pools 22 and 24 and established two plots. The meeting objective was to standardize data collection techniques and discuss data needs while in the field.

All species of plants within the plots were identified, trees heights and diameters were measured and elevations were surveyed. The sites were marked with metal posts and by blazing (cutting the bark) trees surrounding the posts and then painting the blazes.

Team members hope to begin establishing plots within their respective districts this summer. "I felt the experience was extremely advantageous to all those involved, it is nice to have all districts on the same page," said Sobiech.

Photo by Randy Urich

Left to right: Rob Cosgriff, Illinois natural history survey, Kurt Brownell and Jon Sobiech, both from the St. Paul District natural resources office in La Crescent, Minn., determine the age of a green ash on a plot within Pool 22 near Hannibal, Mo.

Team members have a goal to establish 100 plots in each of the districts within three years. Plans are to revisit the plots on a periodic basis every five-10 years.

-Ducks-

"The projects focus on establishing four dominant grasses – big bluestem, little bluestem, Indiangrass and switchgrass," said Edward Lambert, project biologist.

"Prairie grass restoration is of interest to sportsmen because it provides habitat for small game animals like quail and rabbits. We hope to establish a 2,000-acre core area of prairie grass, with another 2,000 acres scattered around it, all within a 10,000-acre total area."

Employees from the Memphis District's Environmental Branch, Regulatory Branch, Futures Team and the Public Affairs Office staffed the booth. They answered questions from visitors and handed out environmental coloring books.

Vicksburg District park rangers John Wilburn and Barry Moss share information about north Mississippi lakes with visitors.

Corps rangers from Vicksburg District's Arkabutla and Sardis lakes staffed the other side of the booth.

"We handed out brochures and told the people there about our lakes," John Wilburn, park ranger co-op student said. "It was great! We had a lot of people come up and ask about fishing, rules and regulations, and ask for directions."

Ducks Unlimited officials said more than 55,000 people from around the nation attended the three-day event.

Regional Corps EEO professionals meet here to network, learn from each other

Story and photos by Jim Pogue, Memphis District

Equal Employment Opportunity Officers and specialists from throughout the Mississippi Valley Division gathered in Memphis June 10-12 for their annual EEO/HR/OC Conference.

"The purpose (of the conference) is for us to update one another and to keep each other informed about what we're doing in our respective districts," Diane Brown, Memphis District EEO Officer said. "We maintain strong relationships with one another because of the type work we do."

Mississippi Valley Division EEO Officer Ann Bargains agreed that conferences like this are valuable.

"I think it's important that we all come together so we can have the same understanding of our processes, and in order that we have some consistency region-wise," she said. "We don't need one region doing the same process, six different ways. It also gives us the opportunity to share regionally our lessons learned, opportunities we've had, initiatives, ideas and to help make our programs more effective."

Brown said 18 people from the New Orleans, Vicksburg, Memphis and Rock Island districts were present, along with EEO leaders from the Mississippi Valley Division and USACE Headquarters. St. Louis District and the MVD Office of Counsel were present via a video teleconference hookup. Representatives from the St. Paul District were unable to attend due to personal conflicts.

The conference kicked-off Tuesday morning with two keynote speakers – civil rights activist Dr. Samuel Kyles, and Memphis EEOC Administrative Judge Hon. Zia Schostal.

"The keynote speakers have been wonderful," Bargains said. "I think having Dr. Kyles come in sort of set the tone for what we are trying to accomplish in meetings like this. When he talked about the fight and the struggle for civil rights – what we do every day in our business is assist a process that came out of the struggle for civil rights. It helps us to understand the importance of what we do every day for this organization and the employees."

Bargains also talked about the other keynote speaker, EEOC Administrative Judge Zia Schostal.

"One of the things that we don't get a lot of, is feedback directly from the EEOC (Equal Employment Opportunity Commission), which is the regulatory arm of all federal EEO programs," she said. "We often hear from them fifth- or sixth-handed. It trickles down, we are sitting and waiting on a policy, and we're supposed to know about the policy but we don't because no one has the information. So when we bring in judges and attorneys from EEOC, we hear first hand what they are doing, what their expectations are and what's coming down the pipeline that's going to effect the way we do business with our customers and our stakeholders."

Following his keynote address, Dr. Samuel Kyles speaks with Mississippi Valley Division EEO Officer Ann Bargains.

Also included in the conference were updates from the various districts and division EEOs, reports from the Human Resources Office and Office of Counsel, updates from headquarters and panel discussions.

The conference ended at noon Thursday with an "Equity Jeopardy" game, designed to test attendees knowledge in a variety of EEO-related topics.

MVD EEO/HR/OC Conference attendees join Dr. Kyles, Memphis District Commander Col. Jack Scherer and MVD EEO Officer Ann Bargains during a break.

Plant an Engineer Seed!

by J. Leo Phillips, Vicksburg District

The Vicksburg and Louisiana Posts of the Society of American Military Engineers (SAME) planted 27 seeds on June 8, 2003. That's the day the first SAME Engineering and Construction Camp at Vicksburg began. The camp concluded on June 14 with a bang as LTG Robert Flowers, Commander of the U.S. Army Corps of Engineers, inspired those 27 high school students to continue to cultivate their interest in engineering. It was the zenith of a week that left the "crewmates" (campers) hungering for more information about the engineering profession.

The group, crewmates, pilots, first-mates and staff of the first week-long SAME Engineering and Construction Camp.

Planning to Plant

Organization and planning for this first-ever camp in Vicksburg began over a year before as the first outline for the week's activities was drafted. Periodic meetings continued throughout the year as the Vicksburg Post Education Committee continued to flesh out the details. From the initial group of four members of the Education Committee, the camp staff grew to include a host of dedicated engineers and professionals from the Engineer Research and Development Center, the Mississippi Valley Division and the Vicksburg District of the U.S. Army Corps of Engineers, as well as construction contractor personnel, and the architect-engineer community. As the Louisiana Post joined the action, the planned number of students grew from 15 to 30, aiming for three teams of ten students each.

A riverboat theme was chosen for the camp. A "Pilot" and a "First Mate," either young engineers or scientists, would lead each team.

Subcommittees were formed to handle execution details of camp staff (pilots, first mates, et al), logistics (food, lodging and transportation), student administration (recruitment, registration, awards, and documentation) curriculum, financial matters, and publicity.

Sowing the Seeds

The most important piece of the camp, the curriculum, paralleled the logistics and support planning. The execution exceeded most of the staff's expectations. Since Vicksburg, Miss., is a centerpiece for water resources engineering in the United States, great opportunities existed to expose crewmates to cutting edge technology in river engineering, hydraulic engineering, materials/geotechnical engineering, construction engineering and environmental engineering. Also, the proximity to the Mississippi River and the Vicksburg National Military Park provided rare opportunities for crewmates to touch landmarks of important history and development of the United States.

Two critical considerations were, from the outset, dictated for consideration in the curriculum – leadership/teambuilding was essential and hands-on activities must be maximized. These were achieved with flying colors. The Vicksburg battlefield and the Mississippi River became bases for teaching leadership as retired Brigadier General Parker Hills took the students back in history and into the minds of Civil War Generals to understand good and bad leadership. It was inspiring for crewmates and camp staff as well to hear qualities and actions that made great leaders in that fateful campaign. This emotion-stirring journey set the tone for leadership throughout the remainder of the camp.

(see SAME, next page)

-SAME-

Lt. Gen. Robert B. Flowers, Chief of Engineers, with the crowning inspiration.

Cultivating the Crop

Hands-on activity achieved a new higher-level definition in this camp. From piloting a 170-foot, 4360 hp U.S. Corps of Engineers tow boat on the Mississippi River to sitting in a U.S. Army Blackhawk helicopter to delineating a wetland by identification of trees and soils, the crewmates had an action filled week. Fun engineering activities included a straw-bridge competition, a radiator project and a timed mechanical assembly test. Though some lecture time was included, emphasis was on learning by doing. This approach captured and held the attention of the crewmates, many of which were almost mesmerized with interest. The varied curriculum provided something for everyone, exposing the crewmates to a wide spectrum of choices in the engineering profession.

The participation of the contractor community, spearheaded by the Associated General Contractors and Fordice Construction Company, helped to provide the construction engineering input to the camp. After learning about concrete mix designs, strength and economy in the morning, crewmates spent the afternoon placing and finishing a concrete slab. They measured the formed area, computed concrete quantity and ordered concrete from the on-site batch plant. Concrete placement and finishing tools were provided to give them a thorough taste of what a one-inch slump, though tending to be high strength, would do to a hot tired placement crew.

The architect-engineer community, through the leadership of Neel-Schaffer, Inc., gave the crewmates an understanding of Global Positioning System (GPS) usage in surveying. They included an exercise in determining a quantity computation of an earthwork volume. Hands-on use of GPS kept the interest level high in this session.

Activities just for fun were also included to give the crewmates some relief from the intensity. An evening of bowling provided some competition while a swim party was just plain fun.

Most activities were scored during the week to further contribute to heightened interest. Team scores were posted each evening for immediate feedback and motivation. The scores became the basis for selection of a "Paddlewheeler" award at the end of the week for the team with the highest score.

Learning Leadership on the Vicksburg battlefield.

The Bountiful Harvest

Though sleep came fitfully for the crewmates on army cots and transportation was in an austere yellow school bus (without air conditioning), by the end of the week the harvest was truly bountiful. Most crewmates were pleading for assurance that they could get the opportunity to return to the camp next year.

The story told by one parent at the end of the week provided the reward that made all the hard work worthwhile for the camp staff: Tenth-grader Johnny had come to the camp not entirely of his own free will. As a matter-of-fact, his father feared he would "have to knock a knot on his head" to get him there. He was something of an introvert and his social skills were not the best. At school, his classmates sometimes poked fun at his diminutive stature and gave him a hard time. At this camp, Johnny found a positive environment in which, to his surprise, his crewmates did not make fun but rather put their arms around him and supported him. The pilots and first mates, as well as the other adults (called affectionately the "old guys" or "the suits" by most campers), constantly reinforced the positive environment, setting the example for support and friendliness while mentoring crewmates in engineering principles.

By week's end, Johnny not only had new friends that would be remembered for the rest of his life, but he had a great positive impression of engineering and those in the engineering profession. What better can any one of us do with our lives than this?

Coming Soon, The National Great Rivers Museum

by Alan Dooley, St. Louis District

You can almost smell it when you walk into the cavernous main hall of the National Great Rivers Museum at Melvin Price Locks and Dam. Maybe the smell is the purple, green or other-hued paint that almost seems to glow under the high intensity display lighting. Whatever its source, it is the smell of "new." It's a good smell. No, make that a great smell.

As this edition of Open Channels comes off the press (or out of the server here in the 21st century) the floors are being sandblasted and prepared for exhibits to be delivered. It is rapidly becoming evident that the museum coming there soon is indeed going to be "GREAT!"

The Mississippi River, flowing only a few dozen feet away from the museum, has been many things to many people. It has been the dividing line between the East and West of a fledgling and growing nation. It has been an object of near reverence for those who lived near it and worked upon it. It has been and remains an inspiration for literature, music and other arts. Today it remains all those things as well as being an avenue of interstate and international commerce, an environmental treasure and a source of physical sustenance for America.

That story and more will comprise the messages and themes that the National Great Rivers Museum will convey to visitors when it opens this summer.

The $5.2 million facility has been called by some the crown jewel of the U.S. Army Corps of Engineers eleven regional visitor centers nationwide.

Soon this artist concept will become reality as a vast array of exhibits fills the display space of the National Great Rivers Museum.

"In a word, it's going to be 'Professional,'" according to Jack Jacoby, who has headed up the Meeting of the Rivers Foundation, an organization that is partnering with the Corps of Engineers to bring this project to fruition.

"We (the foundation) are excited both because of what is coming and the unprecedented partnership between the U.S. Army Corps of Engineers and our foundation that has brought everything together," he added. Covering more than 7,000 square feet of indoor space, the museum will feature displays that examine the river's history and culture, as well as how the river "works." Exhibit materials will also focus on the environment of the river - its geology, wildlife and their relationships with people today. An additional 5,000 square feet will house a theater and classroom, as well as office space.

Several exhibits are designed to be interactive - to give visitors hands-on experiences instead of merely showing them something.

One will encourage visitors to list all of the ways they use water in their daily lives. When they have entered their usages, that amount of water will then flow through the display to graphically demonstrate how much water they use.
Another will be a computerized simulator that will enable people to "Steer the Barges," enabling them to safely experience navigating a 1200-foot tow of barges under bridges and through a lock chamber only five feet wider than the tow.

(see Museum, next page)

Electrical contractors are working hard to finish installation of the lighting fixtures. The new exhibits are arriving daily and installed as they arrive. We will keep you updated as progress continues.

Museum manager and Park Ranger Carol Ryan, is enthusiastic about the comprehensive view the museum will take of the river. "It will tell the whole story of the river - its history and cultural uses - and enable visitors to understand what the U.S. Army Corps of Engineers is contributing to all of those elements," she notes.

Although the museum that is moving toward completion this summer is impressive and already promises to offer a rewarding experience, there is more to come in the future.

The projected next phase will include an exhibit area in a former interim lock control room that overlooks the 1200-foot main lock chamber. It will show visitors how the massive locks and the dam that maintains the navigation pool above them work to support commercial and recreation navigation on the river. Another exhibit there will focus on the towboats and the barges that move a multitude of commodities including more than sixty percent of our nation's agricultural exports to market.

The museum will present a splendid opportunity for visitors from near and far to connect or reconnect with the Mississippi and other great rivers of our nation. For many, crossing the Mississippi on a bridge or seeing it from a distance has been their sole river experience.

With the approach of opening, the St. Louis District is continuing to call for volunteers to help man the visitor center and museum. "These volunteers may offer as many or as few hours of their time as they wish, "according to Phil Manhart, the Rivers Project volunteer coordinator.

"Prerequisites for volunteering are being age 16 or older and enthusiasm," Manhart says. He is especially interested in retired Corps employees who can bring both their firsthand knowledge and experience to bear to enrich the experiences of visitors. Interested persons should call 877-462-6979 to learn more about volunteering.

A GREAT river. A GREAT museum. A GREAT opportunity. The National Great Rivers Museum promises to be all three - and more.

Many of the exhibits will be interactive and offer hands-on learning experiences for visitors of all ages.

Rock Island Spotlight

Doug Davis, Deputy Director for Small Business

Story and photo by Mark Kane, Rock Island District

If you ask the district's new Deputy Director for Small Business what his hobbies are he'll tell you wildlife art and music, but dig a little deeper and you'll find out that, like his job, there's a lot more than most people might expect.

Doug Davis does enjoy wildlife art and music, so much so that he creates them. Davis says he paints wildlife art in a variety of mediums including watercolor, acrylics, pencil, and pen and ink. He says he also plays the guitar and enjoys a variety of musical genres including blues, jazz, rock and country.

On the surface, his job title of Deputy Director for Small Business might not mean much to people, after all, the U.S. Corps of Engineers isn't a small business, so what does Davis do?

Specifically, Davis says he serves as the advisor to the District commander and other district staff members on all policy and procedural issues related to small business.

The district interacts with small businesses all the time.

"The district procures service and supplies which are typically suited for acquisition from small businesses including construction and architectural and engineering services," said Davis.

That's where Davis says he comes into the picture, and if you dig a little further into his job you'll find out that the specifics are exactly what he likes most about it.

Doug Davis, left, speaks with Leonard Ernst, lockmaster, Lock and Dam 12, about his new position with the district and how employees can use his position to make sure they purchase from small business when it is required.

"My job gives me the very unique opportunity to help develop and sustain the ability of small businesses to compete for and win government contracts," said Davis. "There are 23 million American small businesses that generate more than 50 percent of the gross national product, create more than 50 percent of industrial innovations and inventions, employ more than 50 percent of the private workforce, and are the principle source for new jobs."

When asked, Davis says he chose the Corps because it seemed to be operating on the cutting-edge of organizational leadership and management practice.

Davis started his new job at the district April 20, but has plenty of government experience behind him.

"I have been with the Department of the Army for more than 20 years (29 years total government service), and I have worked in private industry as an Organizational Development Consultant and Training Manager," said Davis.

Davis also served eight years of active duty (1970 - 1978) and three years reserve (1981 - 1984) with the U.S. Navy. He was stationed on board the USS Bryce Canyon (AD-36), homeported in Pearl Harbor, Hawaii; on board the USS Kitty Hawk (CV-63), homeported in San Diego, Calif.; and at the Naval Construction Battalion Training Center in Gulfport, Miss.

Davis earned a bachelor of arts from the University at Albany, State University of New York, Albany, N.Y., and is a native of Shenandoah, Iowa.

He currently lives in Davenport with his wife and says he likes the area and the Corps.

"I have found the Corps to be very family oriented and proactive regarding professional development," said Davis.

Davis and his wife have two sons, two daughters, eight grandchildren (five girls and five boys from ages eight to 16). Not surprisingly, he says almost all his grandchildren are also musicians.

"They are very active in sports and we love to watch them play," said Davis.

Davis' advice to anyone reading this article is, "Listen to your neighbors in the community of life and do whatever you can wherever you are, for no one is devoid of resources or opportunity."

To put it in a nutshell he simply said, "Think globally, act locally."

Russians Visit Rock Island District Sites

Story by Mark Kane, Photo by Dan Crone, Saylorville Lake Project

The district played host to a 10-member Russian delegation, sponsored by the Iowa National Guard, as they visited the Saylorville Lake Project, Locks and Dam 15, the Mississippi River Visitor Center and the Clock Tower Building May 19 and 21.

The visit included 10 Russian officials and translators. It took place at their request, so they could become more familiar with the Corps' flood mitigation practices, first hand.

Several years ago, Corps Headquarters established a program to provide Corps support to Russian emergency services personnel, said Terry Stieger, Emergency Management.

Chief Park Ranger Marvin Morris (right) waits to field a question from one of the Russian visitors through an interpreter (left) regarding Saylorville's role as a multipurpose project.

Kevin Carlock, Operations Division, personally made a visit to Moldova (former Soviet Republic) and Germany (to work with the Moldovans) to provide briefings on Geographic Information System applications to emergency response, said Stieger. Kevin Anderson, a former District employee, also made trips to Russia during his tenure.

"The Corps' emergency management community have sent several folks to Russia to brief the Corps' approach to all hazards emergency response," said Stieger.

This was the district's chance to play host to the Russians and showcase our equipment, personnel and accomplishments.

During the Russian officials' visit to the district's Emergency Operations Center, Dennis Hamilton, Programs and Project Management, provided an overview of federal programs designed to mitigate flood impacts. Jim Stiman, Engineering Division, then provided an overview of the district's reservoir system operation, which included gaging systems and data collection and analysis. Stieger then provided an overview of the district's flood-fighting team practices and levee-inspection program.

"I felt they were probably frustrated in that they would like to explore issues in greater detail, but the language barrier was cumbersome," said Stieger. "It seemed to me they were very impressed with our water management system. The automation and extent of the system, in my opinion, boggled their collective minds."

During the Russians' visit to the Saylorville Lake Project they toured the Bob Shetler West campground, Saylorville Dam control tower, outlet and pneumatic-crest gate spillway. While they were at the campground, they also had the chance to see the inside of a camper's recreational vehicle.

"They were very impressed by the RV and the open reception they received and presented the camper with a pin," said Marvin Morris, Saylorville Lake Project. "I believe they were genuinely impressed with what they saw of our operation."

Al Frohlich, Mississippi River Project Office, gave the Russian visitors their tour of the Visitor Center and Locks and Dam 15.

"As with many first-time visitors to the Mississippi, I thought they were excited to see it up close," said Frohlich. "When the district hosts international visitors, it gives us the chance to showcase what we do. Sharing information with others is a great way to learn about their country and culture."

Levee monitoring system withstands test of time

by Eric Lincoln, New Orleans District

At the end of May, the Mississippi River crested in New Orleans for a second time in the 2003 high-water season.

The crest, 13.8 feet in New Orleans, appeared to pose no threat. After all, the simplest emergency procedures don't kick in until 15 feet on a rising river. And the levee is good to 20 feet or more.

But such numbers are not good enough for the U.S. Army Corps of Engineers when it comes to dealing with a potentially devastating failure of the levee and underlying bank.

"This is the time of year that when something happens, it's bad," said Jay Joseph, Engineering Division.

But the struggle to stay ahead of levee trouble goes on all year long. The process is called monitoring. And a great deal of it does not involve walking the levee and eyeballing.

Monitoring and stabilizing levees involves a great deal of cooperation in Engineering Division, Joseph said. This responsibility falls heavily on the Civil and Geotechnical branches.

"Visual monitoring is a separate subject," Joseph said. "The big things are under water."

This is based on the fact that keeping a levee intact depends on stability of the bank beneath it. And most of the bank is under water and unseen.

The Celotex bank and levee failure on July 31, 1985, is the most significant recent example of a flow failure that resulted in failure of the riverbank and levee. The failure was at Mississippi River Mile 100 in the West Jefferson Levee District, one-half mile south of Westwego.

So, the Corps needs to see beneath the Mississippi, a location where, to use understatement, video photography is a waste of time. However, surveys taken by sonar deployed on Corps of Engineers boats and contractors do the job.

"Surveys are the basis of all of the monitoring," Joseph said.

To monitor the powerful river's attack, the Corps takes three approaches:

First, Civil Branch, through the Channel Improvement and Stabilization Program, monitors the underwater bank with annual surveys for scour that threatens stability. When the Channel Improvement Team identifies a potential threat, Geotechnical Branch evaluates it.

"Finally the Channel Improvement Team can assure that the banks are stabilized and armored to prevent deterioration," said Joseph, who is in Geotechnical.

Second, Civil Branch's Levees Team monitors the stability of the levees adjacent to the river banks utilizing levee stability control lines developed by Geotechnical. When potential levee stability problems are noted, Geotechnical Branch evaluates the individual cross-section and recommends remedial action.

The first two kinds of monitoring are designed to detect the failures associated with shear stability. The third kind of monitoring seeks to prevent another kind of failure.

(see Levee, next page)

-Levee-

"This type of failure, referred to as a retrogressive flow failure, could result in a rapid failure of the bank and, possibly, the levee, as a result of scour in susceptible sands," said Joseph, who has done pioneering work on this kind of failure. "We monitor reaches susceptible to this type of flow failure for potential scour problems that could initiate the failure. When indications point to a potential problem, Civil Branch's Channel Improvement Team is notified and remedial action scheduled."

In contrast to retrogressive flow failure, shear failure results when the bank slumps, or slides down into the channel. An example of this kind of failure occurred at Marchand in August 1983.

A notable example of retrogressive flow failure was the Celotex failure in Westwego in July 1985.

"When indications point to this type of flow failure, the Channel Improvement Team is notified and remedial action is scheduled," Joseph said.

It would be easy to think that these precautions are simply the procedure that's routinely followed by all or many Corps of Engineers districts.

Not so. Big River has presented problems that are unique to the United States, and the New Orleans District has come up with strategies to match the problems.

"This three-fold monitoring system is unique to the New Orleans District because our soil conditions and the close proximity of the flood-protection levees to the river," Joseph said.

New Orleans District's sophistication of monitoring for the Lower Mississippi has paid off, he adds.

"There have been no major levee failures along the Mississippi in this district since all three monitoring systems were fully implemented" in 1985.

In fact, the district has a pretty good track record of protecting people who depend on the Mississippi levees to keep dry for longer than most of its employees have been alive.

"Because of the work by the Corps of Engineers, levee boards and the state Department of Transportation, we haven't had flooding of the lands protected by the Mississippi River levee system in 52 years," Ell Pilie, a levee expert in Civil Branch, wrote in 2001.

"In March 1949, the levee on the west bank at Wilkinson Point, upstream of Port Allen, was overtopped and crevassed. This flooded a portion of West Baton Rouge Parish. Other levees have failed since 1949. But none has completely collapsed, and no flooding has occurred on the protected side of the levee," Pilie wrote.

Davis Pond cuts help water flow

by Eric Lincoln, New Orleans District

Two ongoing projects at Davis Pond will help to provide freshwater and nutrients from the Mississippi River to the Barataria Basin.

Since the project opened in August of last year, a maximum daily flow of 1,000 cubic feet per second (cfs) could have been diverted. But this occurred for less than 100 days from last August through May 2003, or about one third of the time.

Cuts through the rock weir at Davis Pond will help drain water out of the ponding area and prevent harm to about 2,200 acres of hardwood trees and wooded swamp. A flotant marsh has prevented water from draining like it should.

(see Davis, next page)

-Davis-

One reason is that water on its way to the Gulf should have been flowing over the top of a rock weir separating the ponding area from Lake Cataouatche. Instead, a special type of marsh prevented this from happening the way it was planned.

"Our initial investigations and borings didn't indicate there was a flotant marsh there," explained Jack Fredine, project manager. "If the marsh were attached to the ground, water would flow over the marsh, over the weir and into the lake. But instead of staying in place, the marsh floats up as the water is introduced, and the weir acts like a dam. The whole area gets bottled up and the water level rises, sometimes up to a foot-and-a-half above the lake stage."

In particular, the higher water levels endanger about 2,200 acres of bottomland hardwood trees and wooded swamp on the western side of the ponding area, which need a dry period during the summer and fall to survive.

The 9,300-foot-long rock weir still protects and stabilizes the ponding area's shoreline as it was meant to do. But to get water out of the ponding area, seven 40-foot-long cuts in the weir will be made to let water out more efficiently.

New mats filled with rock will be placed in the cuts so that the weir will still be intact, but two feet lower. All together, about 300 feet of the weir will be lowered.

Also, poly vinyl chloride, or PVC, sheet piling is being placed on the west guide levee of the ponding area, well south of the Willowdale Subdivision, to reinforce the levee and provide a seepage cutoff wall along some areas built on soft marsh.

Vinyl sheet piling is being used to protect the levee on the southwest side of Davis Pond until the Corps can rebuild it.

A seepage cut wall prevents groundwater from moving underneath one side of the levee to the other.

"We expected the levee to subside since it's built in a soft marshy area," Fredine explained. "The vinyl sheet piling will help make up the difference in height until we can retop the levee."

About 1,200 feet of the piling has been placed so far, with another 1,200 feet to go. "The work's pretty easy because the levee is soft. Instead of pile-driving operations, you just push the piling into the levee with the bucket of a backhoe," Fredine said.

The PVC sheet piling was a practical design recommendation from T. Wade Wright, technical manager in Levees Section, who has investigated the design issues and worked with it before.

"PVC is tremendously easier to use," said Fredine. "It's lightweight and low cost, and it's non-corrosive. Two men can offload and handle it instead of a crane.

"In that area of Davis Pond where there's no adjacent development, we can use it to protect the levee until we can rebuild it. It's a mechanism to keep the high water from the diversion from overtopping the levee."

Wright said, "The use of steel sheet piling will always be there for high-strength requirements, but I think there will be more applications for PVC sheet piling in the future. It's not a substitute for steel, but it does have tremendous applications in some of our projects."

Davis Pond has become an area of national and international interest since it opened. A Dutch delegation toured the site recently, and two Nigerian groups and two Bangladesh groups have been there in the past two years. A German radio show will discuss the project, and there was an article in Civil Engineering magazine and programs on PBS and National Public Radio.

"Land loss isn't only a problem in Louisiana," said Fredine, "but we have a lot more experience with it than most folks."

News Briefs

Memphis District

The controversial St. Johns Bayou & New Madrid Floodway Project cleared the final hurdle the week of June 9 when the Missouri Department of Natural Resources granted the Memphis District water quality certification for the flood control work.

The $85 million project will close a 1,500-foot gap in the levee and provide the flood protection for thousands of acres in the floodway. The area is subject to frequent flooding that threatens both croplands and several small communities.

The certification comes with some additional strings however. Missouri officials required Corps to monitor the environmental impact at the site for five years, construct some additional safeguards to protect Big Oak Tree State Park and fix any problems that emerge.

The Corps will build a levee around the park and a pipe will allow Mississippi River water to drain into the area.

Environmental groups – including the Missouri Coalition for the Environment – are still unhappy with the plan and say they will probably file a new appeal to stop the project.

New Orleans District

The Rotational Training Program, which began in February, is showing new employees a day in the life of their coworkers across the hall.

The program is mandatory for all new engineers and scientists, GS-9 and below. It rotates them through other divisions and offices in four to eight-week shifts to introduce them to other employees and educate them about what goes on elsewhere in the district. Between shifts, employees spend about three months in their own division.

The program is part of the Leadership Development Program, and there are 39 people currently participating.

Mississippi River Low-Water Inspection Trip
10-22 August 2003
Motor Vessel Mississippi

Public meetings will be held by the Mississippi River Commission on board the Motor Vessel MISSISSIPPI as follows:

St. Paul, MN (Lambert's Landing)
9:00 a.m., August 11

Hannibal, MO (City Front)
1:30 p.m., August 14

St. Louis, MO (Riverfront)
9:00 a.m., August 15

Tiptonville, TN (River Park)
9:00 a.m., August 18

West Memphis, AR (Tom Sawyer Park)
9:00 a.m., August 19

Mayersville, MS (Tennis Court Boat Ramp
9:00 a.m., August 20

Morgan City, LA (Port Comm. Dock)
9:00 a.m., August 22

Summary reports will be given by President of the Commission on national and regional issues affecting the U.S. Army Corps of Engineers and commission programs and projects on the Mississippi River and its tributaries.

District Commander's will present an overview of current project issues in the respective district area.

Additionally, there will be presentations by local organizations and members of the public giving views or comments on any issue affecting the programs or projects of the commission and the Corps of Engineers.

For additional information contact Stephen S. Gambrell at: cemvd-ex@usace.army.mil.

Open Channels

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